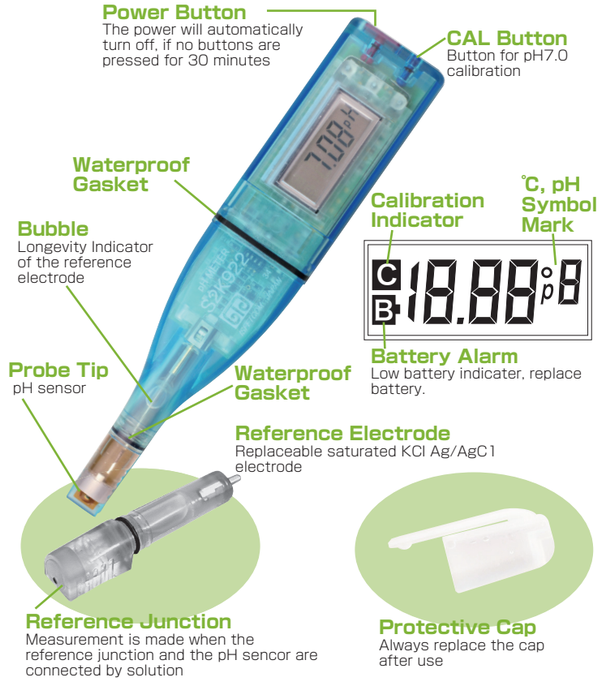
Pocket-sized pH Meter

S2K922 USER'S MANUAL

Before use, please read this manual thoroughly. After reading it, keep it together with the pH meter as a reference.

Features
- Non-glass, unbreakable silicon micro-pH meter
- Display pH and temperature
- Stabilization indicator
- Waterproof
- Measure samples as small as onedrop
- Replaceable reference electrode

NAME AND FUNCTIONS


Power Button
The power will automatically turn off, if no buttons are pressed for 30 minutes
CAL Button
Button for pH7.0 calibration
Waterproof Gasket
Calibration Indicator
°C, pH Symbol Mark
Bubble
Longevity Indicator of the reference electrode
Battery Alarm
Low battery indicater, replace battery.
Probe Tip
pH sensor
Waterproof Gasket
Reference Electrode
Replaceable saturated KCl Ag/AgC1 electrode
Reference Junction
Measurement is made when the reference junction and the pH sencor are connected by solution
Protective Cap
Always replace the cap after use

CAUTIONS

- Keep the S2K922 and all accessories (protective cap, battery, and standard solutions) out of the reach of children. Please consult a doctor immediately if swallowed.
- Prevent the pH standardized liquid from contacting eyes or skin, and do not drink.
- Do not incinerate or attempt to charge the button battery.
- The battery is used to operate a monitoring function, so battery life may be shortened.
- The reference electrode's longevity may be shortened in this pH Meter due to the monitoring function.
- DO NOT store the sensor in solution or use for long term pH measuring applications.
- DO NOT use below 5 ℃ or above 40℃ (40 - 105℉).
- DO NOT leave the sensor uncapped for long periods of time.
- DO NOT allow oil, fat, food particles, starch, protein, or other materials to remain on the pH sensor after use.
- DO NOT use a sharp metal object (needle, pin, etc.) to clean the pH sensor surface.
- DO NOT use in an environment that will damage pH sensor or meter: Organic solvents (acetone, toluene, thinner, oils), strong acids (pH 0-2), strong alkalis (pH 12-14), abrasive samples, silicon etching compounds (hydrofluoric acid).
- DO NOT press the POWER or CAL buttons with sharp objects.
- DO NOT submerge the meter. The meter has water-resistant O-ring seals, but it is not submersible.
- DO NOT use in environments with static electricity. Electrostatic discharge may permanently damage the probe.
- Do not expose the pH meter to electromagnetic radiation.
- Never put into a microwave as this may cause overheating.
- Never wash in an ultrasonic bath.
- Do not bend or drop the main body or reference electrode.
- NEVER disassemble, attempt to repair or alter the main body of the pH meter.

REPLACING THE REFERENCE ELECTRODE

1. Replace the Reference Electrode When…; **1.**The bubble in the reference electrode fills half the liquid chamber. **2.**Response time slows. **3.**There is difficulty in obtaining a stable reading.
2. Wipe the pH meter dry.
3. Pull the reference electrode out of the pH meter.
4. Check to be sure that the watertight O-ring is clean and properly seated on the new reference.
5. Insert the new reference into the pH meter. ISFETCOM Part No. R2K712.
6. Recalibrate the pH meter. Turn on the meter and be sure Er3 °pS disappears and the readout shows pH/ Temperature.

REPLACING THE BATTERY

1. Wipe the pH meter dry. Do not open the meter case if the pH meter is wet.
2. Pull the meter case apart as shown to the right.
3. Gently dry out the battery and replace with the one 3v lithium CR2032 battery. The (+) side of the battery should face up.

4. Be sure the O-ring is not damaged and is in the correct position.
5. Reassemble the meter.
6. Recalibrate. (Press the power button. C 7.01pH and then C 0.00pH will display and the calibration mode will be started.)
7. Dispose of the old battery properly.

ALARM MESSAGES

Er3°pS	The reference electrode is disconnected from the main unit. Check the Reference Electrode or replace the Reference Electrode.
C7.01pH	Calibration mode after Replacing Battery
H.L pH	pH is below pH2 or above pH12. (No pH buffer on the pH sensor / pH sensor and reference electrode junction are not both covered with solution.)
H.L ℃	Below 5 ℃ or above 40 ℃ (40 - 105℉)
Er3pU	The pH sensor has been damaged. Replace the meter
Er3℃	The Temperature sensor has been damaged. Replace the meter

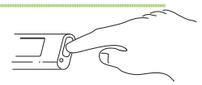
SPECIFICATIONS

Product	S2K922
Sensor	Silicon chip ISFET On chip Temp. sensor
Range	pH2-pH12 0℃～50℃
Accuracy	± 0.02pH ± 1℃
Stability indicator	>± 0.02 pH : "pH/temp."will flash in turn
Measuring Temperature	Power ON : "pH/temp."will flash in turn
Operating Temp. Range	5℃～40℃
Function	1(2)point auto calibration, automatic temperature compensation, waterproof, automatic power off, error massages
Battery	3V lithium battery CR2032 x 1
Battery life	150 hours (approx.)
Dimensions	142× 28× 15mm
Weight	42g (0.1 lbs.)
Accessories	Users manual, pH 7.01 standard solution, carry case
Reference	Consumable Part No.R2K712

CALIBRATION AND MEASUREMENT

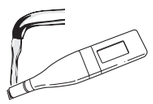
One-point calibration using pH7.01 standard buffer

1. Press the power button.

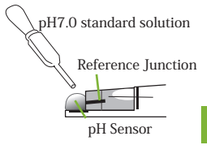


2. This will be indicated on the LCD display for one second.

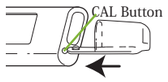
3. The pH meter automatically enters the measurement mode. The display alternates pH and temperature when the power button is pressed. (The icon H.L pH will flash until one drop of solution is applied to the probe tip or the probe is dipped into solution.)



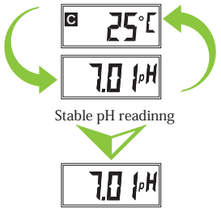
4. Rinse the probe in tap water and blot dry.
5. Apply one drop of 7.01 buffer to the probe tip. Be sure to cover both the reference junction and the pH sensor.

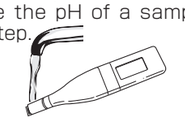


6. Press the CAL button once with the tip of the clip. The C icon, pH and temperature will flash alternately.



7. When the C mark disappears, calibration is complete.
8. Rinse the probe in tap water and blot dry. To measure the pH of a sample, go to the next step.





Measure the sample pH

1. Measure the sample's pH by placing a single drop of solution on the probe tip or dipping the probe into solution.
2. The pH and temperature will flash in turn until a stable reading is obtained.
3. Then the temperature disappears and the pH is displayed.

4. Press to turn the meter off.
5. **When finished, always rinse the probe and replace the protective cap.**

Cleaning the Sensor

1. Gently clean the sensor with soapy water and a toothbrush or cotton-tipped swab. Do not clean the sensor with organic solvents such as acetone, methanol, benzene, or thinner.

2. Rinse the sensor with water.

3. Recalibrate.

2-point calibration using pH 7.01, pH4.01, pH9.18

As an enhanced feature, the meter is capable of up to 2-point calibration. Only the standard buffers of **pH 4.01**, **7.01**, and **9.18** are allowed on our meter. For both alkaline and basic solutions the pH 7.0 buffer calibration is performed the first.

1. Dip the probe into the pH7.01 buffer solution. Press the CAL button for more than 5 seconds with the tip of the clip.
2. The C icon, pH and temperature will flash in turn until a stable reading is obtained. The meter will automatically identify the buffer value.
3. When the first step of calibration is complete, the C icon, 4.01pH and 9.18pH will flash in turn, go to Step 4.
4. Rinse the probe in tap water and blot dry.
5. Dip the probe into the pH4.01 (or pH9.18) buffer solution. Press the CAL button with the tip of the clip. The meter will automatically identify the buffer value.
6. The C icon, pH and temperature will flash in turn until a stable reading is obtained.
7. When C icon disappears, calibration of the second point is complete, and the pH of samples can now be measured.

Notes on Calibration and Measurement

- Soak the probe into solution (neutral) for 5 minutes if the probe is new or has not been in regular use.
- Clean the probe regularly with soft cotton-tipped swabs.
- Keep the sensor surface clean. Be sure the surface of the sensor in the probe is free from any deposits or film.
- STORE THE PROBE DRY with the protective cap covering the probe tip. No electrode storage solution is required. Always place the protective cap over the sensor tip when finished measuring.
- Be sure to use pH 7.01 buffer as a calibration standard.The use of other solutions to calibrate may make measurements inaccurate.
- DO NOT take readings in direct sunlight. Direct sunlight may cause unstable readings or difficulty in calibration.
- Rinse the sensor with distilled or deionized water when testing the pH of tap water, rainwater, or clean water.
- To measure solids such as soil, make a slurry of the sample in deionized or distilled water.
- Do not scratch the pH sensor.
- White powder or gel on the pH sensor is KCl reference solution. Clean before using.

S2K922 WARRANTY

Warranty Stipulations

- The product shall be repaired or replaced free of charge should any trouble occur during the course of normal use if returned within the warranty period (one year from date of purchase). In which event, contact the dealer of purchase. Return the meter with proof of date of purchase.
- Expenses shall be incurred in the following instances within the warranty period. (Costs such as postage shall be paid by the customer)
- Warranty does not apply in the circumstances listed below.
  a) When the date of purchase and store name is not written on the warranty.
  b) When trouble or damage has been incurred due to misuse, abuse, and/or improper handling.
  c) When the meter has been repaired, modified or dismantled by persons other than the designated agent or service shop.
  d) In the event of changes in external appearance such as scratches or dirt caused during use or battery fluid leakage.
  e) In the event of unsuitable movement, dropping or accidents such as fire, earthquakes, floods or a burglary.
  f) When replacing consumables and accessories.
  g) When cause of trouble lies not in the meter itself.
  h) When this warranty is not shown or when necessary particulars have not been written in the warranty.

Our obligation under this warranty is to repair or replace the meter free of charge in accordance with the conditions laid down herein. Accordingly, this warranty does not limit your specific legal rights.

LIMITED WARRANTY

Thank you for purchasing the S2K922. The product you purchased has passed strict quality control and inspections. Should any trouble occur during the course of normal use, the meter will be repaired or replaced free of charge in accordance with the stipulations laid down herein. The term of this warranty shall be for one year from date of purchase. This warranty excludes batteries, the reference electrode, and accessories.

Product name: **Pocket pH meter S2K922**

Company/Facility:

Address:

Phone:

Date of Purchase:

Purchased from:

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